The classification of adverbs

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The definition of adverbs

The basic definition of adverbs:

(1) Adverbs are lexical modifiers of non-nominal heads.

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- (2) a He runs quickly.
 - b He runs.
 - c *He quickly.

The basic definition of adverbs:

(1) Adverbs are lexical modifiers of non-nominal heads.

This means that an adverb is neither compositional nor grammatical.

```
(3) dà gaggāwā with haste 'quickly' (litt. 'with haste')
```

Hausa (Newman 2000: 44)

The basic definition of adverbs:

(1) Adverbs are lexical modifiers of non-nominal heads.

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```
Garo (Burling 2003a: 263, 2003b: 41)
(4) jakrak-e
be.quick-ADV.SUB
'quickly' (litt. 'being quick')
```

The basic definition of adverbs:

- Adverbs are lexical modifiers of non-nominal heads.

This means that an adverb is neither compositional nor grammatical.

```
Hupa (Golla 1970: 135)
```

(5) Yeh-?ı.?ı-n-yaW.ı.

INTO.THE.HOUSE-HAB-2.SG-move

'You always go in.'

The basic definition of adverbs:

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These heads may be lexical or compositional.

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- (6) walk *quickly* (verbal head)
- (7) extremely rich (adjectival head)
- (8) *surprisingly* quickly (adverbial head)
- (9) exactly behind the building (adpositional head)
- (10) soon after he left us (conjunctional head)

The basic definition of adverbs:

- Adverbs are lexical modifiers of non-nominal heads.

These heads may be lexical or compositional.

- (11) Apparently Sheila has left.
- (12) Honestly, you are a crook.

The basic definition of adverbs:

- Adverbs are lexical modifiers of non-nominal heads.

Delimitation with other word classes

Adjectives

- (15) a. Quick steps crossed the street.
 - b. He crossed the street quickly.
 - c. Quickly, he crossed the street.

Delimitation with other word classes

Particles

(16) a. Quite *possibly* she will arrive by train.

b. *Quite maybe she will arrive by train.

Delimitation with other word classes

Adpositions and conjunctions

- (17) He moved to Brazil after the war.
- (18) She went on a holiday before anyone else had been.
- (19) You may come back tomorrow.

Nouns

```
Koyra Chiini (Heath 1999: 441, 123)

(20) a. I-i boyrey ganji di ra.

3.PL.S-IMPF converse wilderness DEF LOC

'They were conversing in the bush.'

b. Ni fatta ganji.

2.sg.s exit wilderness

'You emerged from the wilderness.'
```

Adjectives

```
(21) V \supset N \supset A \supset MAdv
```

```
(22) a. dika sag
good person
'good person'
```

b. dika ealar well say.pst.witn 'said (it) well'

```
Turkish (Göksel and Kerslake 2005: 49)
(23) a. güzel-im
       beauty-1.POSS
       'my beauty'
    b. güzel bir
                      köpek
       beauty INDEF dog
       'a beautiful dog'
    c. Güzel konuş-tu-Ø
       beauty speak-PST-3.SG
       'S/he spoke well.'
```

Adpositions and conjunctions

- (24) a I met him outside the office.
 - b I will wait for you outside.
- (25) a I saw him before he left the office.
 - b I have met him before.

Internal: Derivation

Spanish

(26) natural-mente natural-ADVR 'naturally'

ilegal-mente illegal-ADVR 'illegally' real-mente real- ADVR 'really' evidente-mente evident- ADVR 'evidently'

-mente < Lt. mens 'mind'

Internal: reduplication

```
Garo (Burling 2003b: 31, 38, 111, 211)
```

```
(27) bra~bra chap~chap jrip~jrip srang ~srang pour.into~advr attach~advr be.silent~advr be.clear~advr 'in large numbers' 'side by side' 'silently' 'clearly, fluently'
```

Internal: Adpositional phrases

Udihe (Nikolaeva 2001: 370)

(28) zugdu 'at home' < zugdi-du 'house-DAT' 'in the house

Internal: serial verbs

```
Moskona (Gravelle 2010: 142)
(29) a. Dif di-ecira di-okog.

I 1.sg-walk 1sg-precede

'I walked [and] preceded (them).'
b. Dif di-ecira kog.
I 1.sg-walk ahead
'I walked ahead.'
```

External: borrowing

Otomi (Gómez Rendón 2008: 333, 334, 411)

(30) mälmente 'wrongly' < Sp. malamente

pobremente'na 'poorly' < Sp. probremente

prinsipalmente 'mainly' < Sp. principalmente

lwego 'afterwards' < Sp. luego

Ideophones ('marked words that depict sensory imagery' (Dingemanse 2012: 654)).

```
Korean (Sohn 1994: 88)
```

```
(31) ttalkak-ttalkak wulkus-pwulkus sol-sol mikkun-mikkun 'rattling' 'colorfully' 'gently' 'smoothly, sleekly, oily'
```

Classes of adverbs in FDG

Adverbs may be classified along two parameters:

- the semantic or pragmatic domain to which the adverb belongs.
- the target of the adverb;

(cf. Hengeveld 2004 on modality)

Adverbs may be classified along two parameters:

- the semantic or pragmatic domain to which the adverb belongs.
- the target of the adverb;

The domain to which an adverb belongs concerns the types of meaning and the types of function the adverb expresses. I distinguish the following domains: degree, manner, participation, quantification, location, time, modality, perspective, evidentiality, intensification, speaker evaluation, and textual organization.

Adverbs may be classified along two parameters:

- the semantic or pragmatic domain to which the adverb belongs.
- the target of the adverb;

The target of an adverb is the part of the utterance it has in its scope. In FDG this translates into the layer to which the adverb is applied as a modifier.

Scope

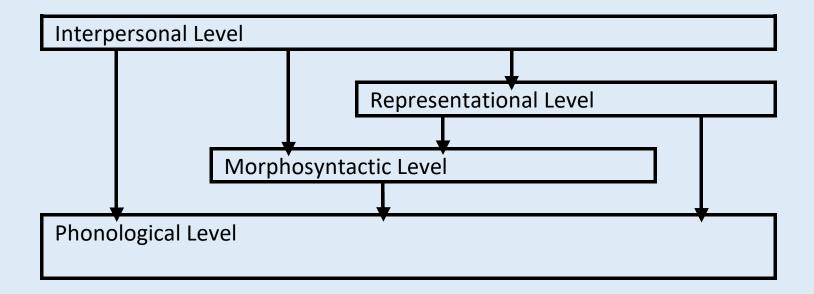
- (32) a. He left quickly recently.
 - b. *He left recently quickly.
- (33) a. Reportedly he probably left the building.
 - b. *Probably he reportedly left the building.

Adverbs may be classified along two parameters:

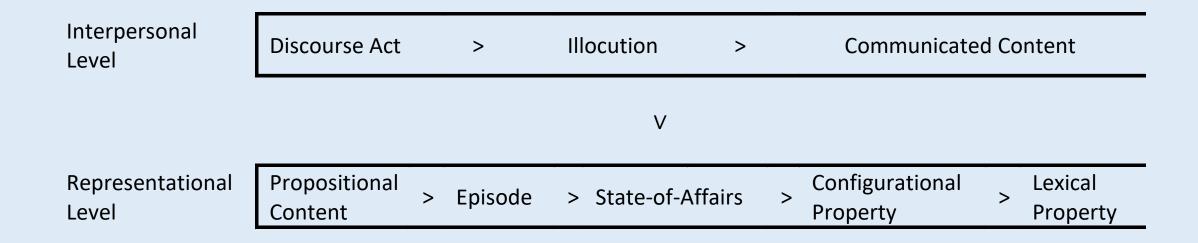
- the semantic or pragmatic domain to which the adverb belongs.
- the target of the adverb;

The first of these parameters is more readily testable than the second, where classes are partly identified on the basis of descriptive convenience. The second needs further explanation, for which we need a detour to Functional Discourse Grammar.

Levels in FDG



Scope relations



Operators and modifiers

```
(34) (\pi p_1: [-----] (p_1): \sigma (p_1))
```

(35)

She must be the happiest woman in the world.

(infer p_1 : [-she is the happiest woman in the world-] (p_1))

She is presumably the happiest woman in the world.

(p_1 : [-she is the happiest woman in the world-] (p_1): presumably (p_1))

Layers and operators

Layer	Definition	Relevant operator categories
Lexical Property	the property expressed by any lexical predicate	local negation, property quantification, directionality
Configurational Property	the combination of a predicate and its arguments that characterizes a set of States-of-Affairs	participant-oriented modality, failure, qualitative aspect, participant-oriented quantification
State of Affairs	events or states, i.e. entities that can be located in relative time and can be evaluated in terms of their reality status	event-oriented modality, non-occurrence, event perception, relative tense, event quantification, event location
Episode	one or more States-of-Affairs that are thematically coherent, in the sense that they show unity or continuity of time, location, and participants	objective epistemic modality, subjective deontic modality, co-negation, deduction, absolute tense
Propositional Content	a mental construct that does not exist in space or time but rather exists in the mind of the one entertaining it	subjective epistemic modality, disagreement, inference
Communicated Content	the totality of what the Speaker wishes to evoke in his/her communication with the Addressee	denial, reportative, mirative
Illocution	the lexical and formal properties of a Discourse Act that can be attributed to its conventionalized interpersonal use in achieving a communicative intention	illocutionary modification
Discourse Act	the smallest identifiable unit of communicative behaviour	irony, reinforcement, mitigation, rejection, quotative

Testing for layers

Cooccurrence restrictions with operators:

(36) a. She arrived/*will arrive recently.

b. They arrived/will arrive simultaneously.

Cooccurrence restrictions with lexical features:

Lexical Property:

(37) a deeply disappoint/*deeply injure

b *severely disappoint/severely injure

Cooccurrence restrictions with lexical features:

Configurational Property:

(38) They/*he went to Paris jointly.

(39) She reached the summit *completely.

Scopal relationships

(40) They completely emptied their rooms simultaneously.

(41) Recently they emptied their rooms simultaneously.

```
simultaneously > completely
recently > simultaneously
then by transitivity (Cinque 1999)
recently > completely
```

Scopal relationships

- (40) They completely emptied their rooms simultaneously.
- (41) Recently they emptied their rooms simultaneously.

If we know that

- recently is at the episode layer
- completely is at the configurational property layer then
- simultaneously must be at the state-of-affairs layer

If two or more adverbs from the same domain can cooccur in a single sentence, this demonstrates that they apply at different layers. Thus, (41) illustrates that *recently* and *simultaneously*, both from the temporal domain, cannot pertain to the same layer.

(41) Recently they emptied their rooms simultaneously.

A preliminary classification

- Is given on the next slide;
- All examples concern English adverbs in –ly;
- Apart from the F(D)G publications mentioned earlier, the classification is partly inspired by Ramat & Ricca (1998) and Cinque (1999).

	Lexical Property	Configurational Property	State-of-Affairs	Episode	Propositional Content	Communicated Content	Illocution	Discourse Act
Degree	Degree <i>extremely</i>							
Manner	Predicate- oriented <i>beautifully</i>	Subject-oriented angrily						
Participation		Additional participant <i>manually</i>						
Quantification		Event-internal briefly	Event-external frequently					
Location		Direction diagonally	Relative location internally	Absolute location nationally				
Time		Aspect completely	Relative Time simultaneously	Absolute Time recently				
Modality		Participant Oriented <i>easily</i>	Event-oriented obligatorily	Objective epistemic <i>really</i>	Subjective epistemic probably			
Perspective					Perspective technically			
Evidentiality			Event perception visibly	Deductive seemingly	Inferential presumably	Reportative reportedly		
Intensification						Intensification definitely		
Speaker evaluation					Sp. eval. of Prop.Cont. foolishly	Sp. eval. of Comm.Cont. fortunately	Sp. eval. of Illocution <i>frankly</i>	Sp.eval. of Discourse Act sadly
Textual organization								Situating the Discourse Act <i>finally</i>

Degree

(44) severely injure (verb)	f
(45) excessively rich (adjective)	f
(46) remarkably quickly (adverb)	f
(47) exactly behind the building (adposition)	f
(48) instantly after he left us (conjunction)	f

Degree

```
(49) a
       deeply disappoint/*deeply injure
          *severely disappoint/severely injure
     b
Dutch
(50) a
          knap
                 lastig
          quite difficult
          'quite difficult'
     b
          *knap gemakkelijk
          quite easy
          'quite easy'
```

Manner

(52) She danced beautifully.

(53) She left the room *angrily*.

Predicate-oriented Manner – fl

Subject-oriented Manner – f^c

Manner

b

f (54) a They build *shoddily*. *They cook *shoddily*. b (55) a She dresses *loudly*. b *She makes up *loudly*. fc (56) a She *angrily* left the room.

They were listening angrily.

He angrily slept on the sofa.

12/26/20

47

Manner

(57) She angrily danced beautifully.

 $f^{l} + f^{c}$

Not included in manner category:

(58) John stupidly answered the question.

Participation

(59) She laminated the dough manually.

(60) They mutually support each other.

(62) They went to Paris *jointly*.

manually and mutually only with Actors
mutually and jointly only with plural first argument

Instrument – fc

Reciprocal – f^c

Company – f^c

Quantification

(62) She frowned briefly.

(63) She visited her friends frequently.

Event-internal – f^c

Event-external – e

(64) She reached the summit *briefly/frequently.

(65) She frequently frowned briefly.

Location

- (66) He crossed the square *diagonally*. Direction f^c
- (67) The bank was reorganized *internally*. Relative Location e
- (68) The policy was implemented *nationally*. Absolute Location ep

- (69) The car oscillates severely diagonally.
- (70) The metal pipes run diagonally internally.
- (71) Probably, in their installations the metal pipes run diagonally internally nationally. (i.e. 'Probably, nation-wide the metal pipes run diagonally in the internal part of their installations.')

Time

- (72) He emptied the room *completely*.
- (73) The shops opened simultaneously.
- (74) She met her friends recently.

- Aspect f^c
- Relative Time e
- Absolute Time ep
- (75) They reached the summit *completely/simultaneously/recently.
- (76) Having emptied the room *completely/*simultaneously*, he treated himself to an espresso.
- (77) The shops will open completely/simultaneously/*recently.
- (78) Recently they completely emptied their rooms simultaneously.

Modality

(79) She climbed the tree competently.

(80) One obligatorily takes off one's shoes here.

(81) She will *really* loose her temper.

(82) She is *probably* ill.

Modality – f^c

Modality – e

Modality – ep

Modality – p

Modality

- (83) The fire extinguisher is *competently/obligatorily/really/probably full.
- (84) She has *obligatorily/really/probably filled the watter bottle.
- (85) She was really/probably ill yesterday.
- (86) Was she really/*probably ill yesterday?

Modality

- (87) Probably people really have to be able to swim competently obligatorily in order to enter the swimming pool. (i.e. 'Probably it is the reality that one has to be able to swim in order to enter the swimming pool.'
- (88) Your behaviour will probably really lead to your dismissal.
- (89) He *really* had to stay away *obligatorily* from the office after his dismissal.
- (90) One *obligatorily* has to swim *competently* in a country with lots of water.

Perspective

(91) Technically, they won the war, but morally, they did not.

Perspective – p

(92) Reportedly, they technically won the war.

Evidentiality

(93) She visibly blushed.

(94) She has seemingly left the building.

(95) She is *presumably* ill.

(96) She is reportedly on a holiday.

Evidentiality – e

Evidentiality – ep

Evidentiality – p

Evidentiality – C

Evidentiality

- (97) She *visibly/seemingly/presumably/reportedly didn't blush.
- (98) She didn't visibly/*seemingly/*presumably/*reportedly blush.
- (99) She will *seemingly/presumably/reportedly leave the building by eight o'clock.
- (100) Reportedly/*presumably she certainly left the building.
- (101) Honestly, she reportedly left the building at eight o'clock.

Evidentiality

- (102) Reportedly she presumably left the building.
- (103) *Presumably* she had *seemingly* left the building, which may be why he did not knock on her door.
- (104) Seemingly she visibly blushed, as she turned away her face so that I wouldn't notice.

Intensification

(105) I am definitely going to vote in the next elections.

Intensification – p

- (106) He is definitely probably going to run for president.
- (107) Quite frankly, it is definitely not the best day to go to the beach!

(108) She foolishly slept the whole day.

(109) Fortunately, she came alone.

(110) Frankly, she doesn't seem interested.

(111) Sadly, your mother has died.

Speaker Evaluation – p

Speaker Evaluation – C

Speaker Evaluation – F

Speaker Evaluation – A

- (112) I think it was foolish of her to sleep the whole day.
- (113) I am happy to say that she came alone.
- (114) I am saying frankly that she doesn't seem interested.
- (115) I am sad that I have to tell you that your mother has died.

(116) A: She foolishly slept the whole day.

B1: That's not true. She did not sleep the whole day.

B2: *That's not true. That isn't foolish.

(117) A: Fortunately, she came alone.

B1: That's not true. She did not come alone.

B2: *That's not true. You are not happy to say so.

(118) A: Frankly, she doesn't seem interested.

B1: That's not true. She does seem interested.

B2: *That's not true. You are not being frank.

(119) A: Sadly, your mother has died.

B1: That's not true. She hasn't died.

B2: *That's not true. You are not sad that you have to tell me.

- (120) They *probably foolishly* believed the American Defense Department Big Lie that radiation does not hurt you. (NOW, US)
- (121) Last year in MUT I *foolishly probably* spent between \$750-\$1000. (https://answers.ea.com/t5/FIFA-15/Packs/td-p/4556769)

(122) Former Enron president wisely left firm in 1996, uncomfortable with 'asset light' strategy. (COCA, magazine)

- (123) Fortunately, she wisely slept the whole day yesterday.
- (124) Frankly, she fortunately slept the whole day yesterday.

- (125) ?Frankly/honestly, go home!
- (126) a. Seriously, Andy can play rugby.
 - b. Seriously, can Andy play rugby?
- (127) Finally, I frankly did not like the way you acted today.

(128) Sadly, I honestly think you have made a big mistake.

Textual organization

(129) Finally, this was my last lecture.

Textual Organization – A

(130) Importantly, the students should be involved.

Textual Organization – A

(131) Briefly, the bill seeks more justice for tenants.

Textual Organization –A

Textual organization

- (132) Finally, do not forget to close the door.
- (133) Finally, do you like it or not?

Formal and behavioural correlates

The form and behaviour of adverbs

Adverbs in different domain classes, i.e. with different degrees of scope, show differences in form and behaviour from a typological perspective. These differences concern:

- the existence of classes of adverbs;
- the morphological marking of adverbs;
- the order in which adverbs occur.

Sample

Data from a 50-language sample. Study with (bibliographical) limitations. Only sufficient data for existence and some types of morphological marking.

A'ingae, Albanian, Apuriña, Bardi, Barupu, Basque, Betta Kurumba, Bininj Gun-wok, Burushaski*, Central Alaskan Yupik, Choctaw, Chukchi, Cupeño, Gã, Gaguudju, Garo, Goemai, Hungarian, Hupa, Ingush, Jalkunan, Ket*, Kharia, Konso*, Korean, Koyra Chiini*, Lango, Lao, Laz, Lumun, Mandarin, Mani, Mapudungun, Matsés, Mauwake*, Mehek, Mian, Moskona, Movima*, Mualang*, Musqueam, Ngiti, Nivkh, Noon*, Paiwan, Palula, Pichi, Puyuma*, Quechua*, Rapanui, Southern Pomo*, Sumerian*, Tamashek*, Tidore, Ts'ixa*, Turkish, Warao, Warrongo, Xong, Yeri

The existence of classes of adverbs

Registering the classes of adverbs mentioned in grammars, an interesting typological hierarchy suggests itself: the existence of adverbs at a higher layer implies the existence of adverbs at all lower layers.

(134) Lexical Property ⊃ Configurational Property ⊃ State-of-Affairs ⊃ Episode ⊃ Propositional Content ⊃ Communicated Content ⊃ Illocution ⊃ Discourse Act

The existence of classes of adverbs

	f ^l	f ^c	е	ер	р	С	F	А
Apurinã, Lao, Choctaw, Kharia								
Paiwan	+							
Warao, Xong, Yeri	+	+						
Barupu, Garo, Mian, Moskona	+	+	+					
Basque, Betta Kurumba, Bininj Gun- Wok, Central Alaskan Yupik, Goemai, Laz, Mani, Matses, Mehek, Ngiti, Nivkh Jalkunan Warrongo,	+	+	+	+				
A'ingae, Chukchi, Cupeño, Gaguudju, Lango, Lumun, Mandarin, Mapudungun, Musqueam, Palula, Rapanui, Tidore	+	+	+	+	+			
Albanian, Bardi, Gã, Hungarian, Hupa, Ingush, Korean, Pichi	+	+	+	+	+	+		
Turkish	+	+	+	+	+	+	+	+

- (i) the use of reduplication as an expression strategy at certain layers;
- (ii) the use of flexible modifiers (adjectives/adverbs) at certain layers;
- (iii) dedicated adverbial marking at certain layers.

Reduplication

Languages using reduplication to form adverbs, do so at the lower layers only.

Korean (Sohn 1994)

mwulek~mwulek '(growing) rapidly'

allang~allang 'cunningly, with flattery'

f^c

Flexible modifiers

Another interesting tendency observed in the data is that languages with flexible modifiers (adjective/adverb), use these as adverbs at the lower layers only. At higher layers there are dedicated adverbs.

Flexible modifiers

```
Lango (Noonan 1992: 181)

(135) à bèbèr

'good/well'

(136) nî lwájé

'*clumsy, clumsily'
```

Flexible modifiers

Ingush	(Nichols 2011: 377, 229)	
(137)	sixa 'rapid, rapidly'	f
(138)	xaarc 'false, falsely'	f
(139)	Pxoragh '*horizontal, horizontally'	6

Flexible modifiers

Mapudungun

(140)

(141)

(142)

Flexible modifiers

	Discourse Act	Illocution	Communicated	Propositional	Episode	State-of-Affairs	Configurational	Lexical Property
			Content	Content			Property	
Lango								+
Ingush							+	+
Mapudungun						+	+	+

Explicit adverbial morphology

More explicit adverbial morphology seems to be specific for higher layers.

English strangely enough (speaker evaluation) versus strangely (manner).

Dutch *snel* 'quick(ly)' (manner) versus *mogelijker-wijs* 'possibly' (subjective epistemic modality) and *eerlijk gezegd* 'honestly said' (illocutionary modification).

Conclusions

Conclusions

Adverbs can be classified along two parameters: the layer at which they apply and the semantic/pragmatic domain to which they belong.

The layer at which they apply can be identified though the selection restrictions that adverbs impose, the subordinate constructions in which they may appear, and the scope relations among different classes of adverbs.

The hierarchical classification is reflected in the existence of classes of adverbs in individual languages and some aspects of their morphological marking.

Manner/Configurational Property

- She left the room *angrily*.

Manner/Lexical Property

She danced beautifully.

Participation/Configurational Property

They mutually support each other.

Participation/Lexical Property

She laminated the dough manually.

Quantification/State-of-Affairs

- She visited her friends frequently.

Quantification/Configurational Property

- She frowned briefly.

Quantification/Lexical Property

- She is *extremely* rich.

Location/Episode

- The policy was implemented nationally.

Location/State-of-Affairs

- The policy was announced *publicly*.

Location/Configurational Property

He crossed the square diagonally.

Time/Episode

- She met her friends recently.

Time/State-of-Affairs

She subsequently went to work.

Time/Configurational Property

Work on the road is due to start imminently.

Modality/Propositional Content

- She is *probably* ill.

Modality/Episode

- She will *inevitably* loose her temper.

Modality/State-of-Affairs

- She *obligatorily* greeted everybody.

Modality/Configurational Property

- The work is done *easily*.

Perspective/Propositional Content

Technically, they have won the war, but morally, they have not.

Evidentiality/Communicated Content

- She is *reportedly* on a holiday.

Evidentiality/Propositional Content

- She is *presumably* ill.

Evidentiality/Episode

- She is *seemingly* not at home.

Evidentiality/State-of-Affairs

She blushed visibly.

Speaker Evaluation/Discourse Act

- Sadly, he passed away.

Speaker Evaluation/Illocution

- Frankly, she doesn't seem interested.

Speaker Evaluation/Communicated Content

- Surprisingly, she came without a present.

Speaker Evaluation/Propositional Content

- Hopefully she will arrive in time.

Speaker Evaluation/Episode

- She regretfully didn't say what she was thinking.

Speaker Evaluation/State-of-Affairs

- She *foolishly* slept the whole day.

Textual Organization/Discourse Act

- Finally, this was my last meeting as a chairman.